# Microsoft Business Intelligence

Business Intelligence Platform

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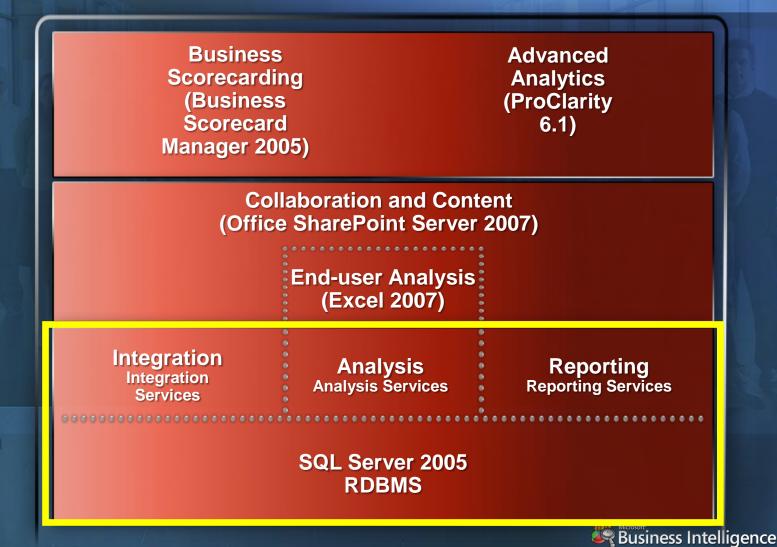
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#### Microsoft Business Intelligence Oferta *end-to-end* integrada

**Aplicações** 

**Plataforma** 



### SQL Server 2005 Management Studio Ferramenta de gestão unificada

Gestão integrada

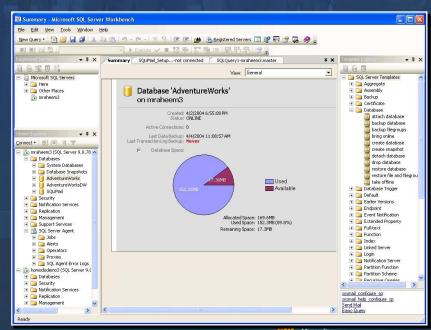
 BDs relacionais, Analysis Services, Reporting Services, Notification Services, SQL Server Mobile

Múltiplas versões de SQL Server a partir de um único

interface

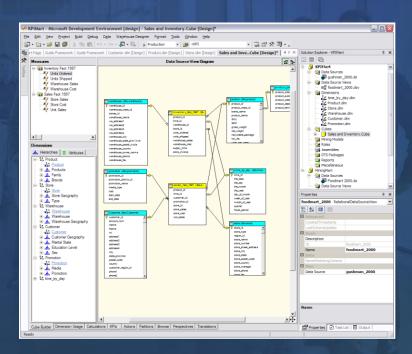
Performance

- Gestão de múltiplos servidores e objectos
- Operações: Profiler, Query Analyzer



### Bl Development Studio Incluído no SQL Server 2005

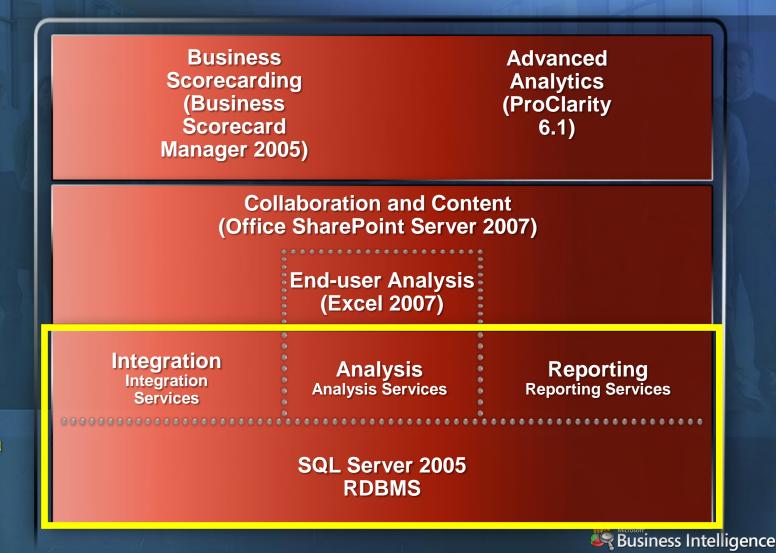
- Ferramenta completa e integrada de desenvolvimento de aplicações BI
- Uma ferramenta, múltiplas tecnologias:
  - Relacional, OLAP, DM, SSIS, Reporting, Código, páginas Web...
- Ambiente empresarial de desenvolvimento de software:
  - Integração com Visual Studio.NET
  - Team development, source control, versioning, developer isolation, resource independent coding
- Suporta todo o cliclo de vida do desenvolvimento
  - Develop, Test, Deploy, Modify, Test...
- Facilidade de utilização inovadora



#### Microsoft Business Intelligence Oferta *end-to-end* integrada

**Aplicações** 

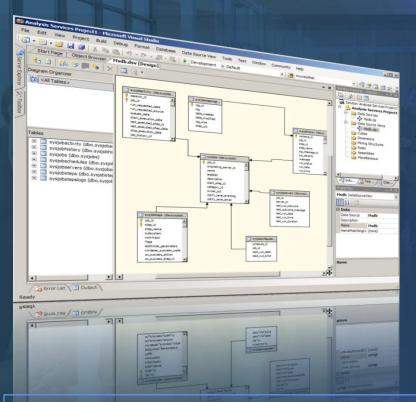
**Plataforma** 



### Business Intelligence Relational Data Warehousing

"With the release in November 2005 of SQL Server 2005,
Microsoft is moving into the mainstream DW DBMS market.
Since its release, Microsoft has seen double-digit revenue
growth and leads the Windows relational database
management system (RDBMS) revenue market with 46.8%
of the market and 16.6% growth from 2004 to 2005."—
Gartner's 2006 Data Warehouse (DW) Database
Management Systems (DBMS) Magic Quadrant

## SQL Server 2005 Analysis Services Melhores capacidades OLAP e Data Mining



- Unified Dimensional Model
- Pro-active caching
- Web services
- Data Mining
- Ferramentas de Desenvolvimento
- Failover Clustering





Decision Trees Clustering

Presentes no SQL Server 2000



Time Series



Naïve Bayes



Sequence Clustering



**Association** 



**Neural Net** 

#### E ainda...

- ★ Logistic Regression
- ★ Linear Regression

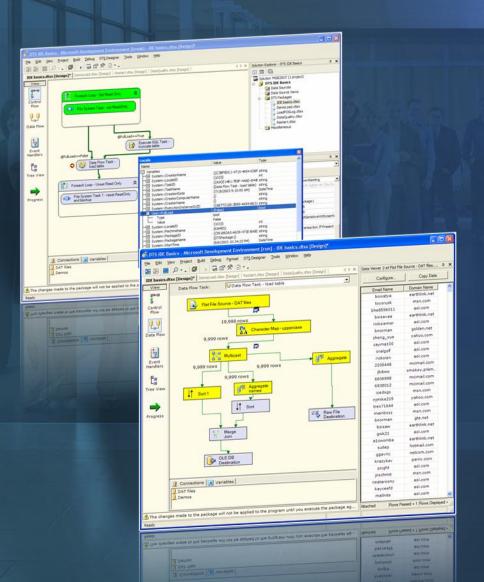


### SQL Server 2005 Analysis Services

demo



### SQL Server 2005 Integration Services Plataforma ETL inovadora



- Plataforma ETL empresarial
  - Rápida
  - Escalável
  - Fiável
- Fácil e amigável de utilizar
  - Ambiente de desenvolvimento
  - Controlo de versões
  - Debugging visual
  - Grande gama de transformações
- Extensível
  - Tasks
  - Transformations
  - Data sources



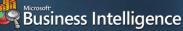
## SQL Server 2005 Integration Services Novas funcionalidades e componentes

SQL Destination **Derived Column Transform** File Extractor Transform Row Count Transform XML Source Adapter Data Reader Source Adapter Shrink Database Task Time Gen Source Adapter **Property Expressions Dataflow Task** Merge Join Transform Merge Transform Sort Transform Audit (Lineage) Transform Union All Transform SQL CE Destination Adapter **DTExec Execution Stack Window HTTP Connection Manager** For Loop Container For Each Loop Container **Evaluate As Expression DTUtil** Aggregate Transform Lookup Transform **Enhanced Error Reporting** Execute DTS 2000 Package Task Web Services Task **New Migration Wizard** Conditional Split Transform **SQL Mobile Connection Manager** Flat File Connection Manager Enhanced Import/Export Wizard Upgrade Analyzer for SSIS ActiveX Script Task Pivot Transform **Un-pivot Transform** Recordset Destination Adapter OLE DB Source Adapter OLE DB Destination Adapter Flat File Source Variable Namespaces

Data Conversion Transform Excel Source Adapter **Excel Destination Adapter OLEDB Reader Adapter** Visualizers Integration Services Server Component Enumeration Caching Debugging Support in the Designer **Data Reader Destination Adapter Debugging Breakpoints** IS Projects in VS Watch Windows Log Viewer Windows **Deployment Wizard** Transfer Logins Task MSMQ Task F1 Integrated Help Copy/Paste in the Designer **ADO Connection Manager** ADO.NET Connection Manager File Connection Manager Analysis Services Processing Task Row sampling Transform WMI Event Watcher Task Percent sampling Transform **Execute Process Task** Text Log Provider Multicast Transform WMI Query Task FTP Connection Manager Raw Source Adapter MSOLAP90 Connection Manager Multi-file Connection Manager Multi-Flat File Connection Manager **ODBC Connection Manager OLEDB Connection Manager** Easy Dataflow Adapter Extensibility **SMO Server Connection Manager** Transfer Errors Task ForEach Item Enumerator Runtime Execution Engine Data Source Views

DTExecUI Intellisense Help **Designer Grouping** Workflow Designer **Dataflow Designer Event Handler Designer Output Window** Error Window Right Click Online Error Access **Tools Options pages** For Each ADO.NET Enumerator Import/Export Wizard Auto-layout algorithms Raw Destination Adapter Runtime Execution Engine Configuration Wizard Integration Services Roles Package Encryption Options **Notify Operator Task** Package Signing SAP .NET Provider Managed Task Base Class ADO.NET Script Task File Inserter Transform MSMQ Connection Manager **ADO.NET Script Component** For Each From Variable Enumerator Easy Transform Extensibility Transfer SQL Server Objects Task Excel Connection Manager SQL Server Log Provider SQL Profiler Log Provider Easy ForEach Enumerator Extensibility Windows Event Log Provider ForEach Nodelist Enumerator **SQL Server Configurations** XML Configurations Registry Configurations **Environment Variable Configurations** Sequence Container **Event Handlers** ForEach File Enumerator

Slowly Changing Dimension Transform Control Flow Designer Send Mail Task SQL Task File System Task XML Task Native Object Model **SMTP Connection Manager Bulk Insert Task** Analysis Services Execute DDL Task Back Up Database Task Check Database Integrity Task Execute T-SQL Statement Task Maintenance Cleanup Task Rebuild Index Task Reorganize Index Task Workflow Checkpoint Restartability Real time Designer Execution Monitoring User defined transaction scope FTP Task Easy Task Extensibility Transfer Stored Procedures Task Easy Connection Manager Extensibility **Update Statistics Task** Easy Log Provider Extensibility Integrated Development Environment WMI Connection Manager History Cleanup Task .NET Compatible Flat File Destination Transfer Database Task **Data Convert Transform** Managed Object Model XML Persisted System Variables New Events OnPreExecute etc. For Each ADO Enumerator Read Only Variables **OLEDB Command Transform** XML Log Provider **Dataflow Execution Engine** Package Explorer



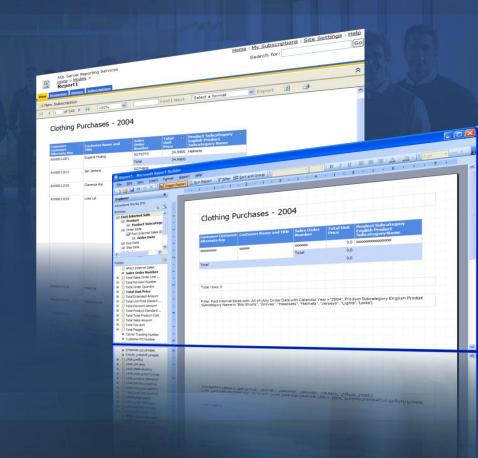
## SQL Server 2005 Integration Services

demo



# SQL Server 2005 Reporting Services Melhores capacidades Reporting

- Escalabilidade
  - Plataforma de Reporting Empresarial
  - Múltiplas fontes de dados e opções de delivery
  - Arquitectura Web Services
  - Scheduling, Snapshots, Caching, etc...
- Ferramentas de criação avançadas
- End-user, Ad Hoc Reporting
- Forte componente de gestão
  - SOAP Web Service APIs
  - Portal Report Manager
  - Modelo de segurança extensível
  - Integração com AS, IS, ferramentas de gestão





### Report Builder Ad-hoc Reporting

- Linguagem de negócio
- Ferramenta de fácil utilização
- Ad hoc Reporting para o utilizador
- Report Builder permite:
  - Reports a partir de um Business Model
  - Modificar um Report
  - Contruir um novo Report
  - Fontes de dados relacionais e OLAP





### SQL Server 2005 Reporting Services

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